



2692  
Customer Number

17W

Patent  
Case No.: 58783US002

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

First Named Inventor: GERLACH, CHRISTOPHER P.  
Application No.: 10/620027      Group Art Unit: 1621  
Filed: July 15, 2003      Examiner: Unknown  
Title: BIS(2-ACENYL)ACETYLENE SEMICONDUCTORS

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:	
Date <b>JUN 18 2004</b>	Signed by: <i>Hylis H. Froelke</i> Hylis H. Froelke

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. Copies of any cited foreign patents, non-patent literature, and unpublished US application documents are enclosed. Pursuant to the waiver in the Pre-OG Notice, dated July 11, 2003, copies of US patents and published US patent applications are no longer required and are not enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

If a first Office Action on the merits has been mailed prior to the mailing date of this document, please charge the fee for consideration of an Information Disclosure Statement set forth in 37 CFR § 1.17(p), and if necessary, please charge any additional fees, or credit any overpayment to Deposit Account No. 13-3723.

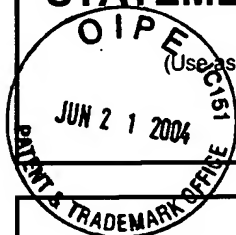
Respectfully submitted,

Date June 18, 2004

By: *K. S. Kokko*  
Kent S. Kokko, Reg. No.: 33,931  
Telephone No.: (651) 733-3597

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT



(Use as many sheets as necessary)

Page 1 of 2

Application Number

10/620027

Filing Date

July 15, 2003

First Named Inventor

Gerlach, Christopher P.

Art Unit

1621

Examiner Name

Unknown

Attorney Case Number

58783US002

## U.S. Patent Documents

Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A1	US- 2003/0094959 A1	05/22/2003	Hoisington et al.	
	A2	US- 2003/0102471 A1	06/05/2003	Kelley et al.	
	A3	US- 2003/0105365 A1	06/05/2003	Smith et al.	
	A4	US- 2003/0150384 A1	08/14/2003	Baude et al.	
	A5	US- 5,347,144	09/13/1994	Garnier et al.	
	A6	US- 5,956,679	09/21/1999	Komori et al.	
	A7	US- 6,215,130 B1	04/10/2001	Dodabalapur	
	A8	US- 6,265,243 B1	07/24/2001	Katz et al.	
	A9	US- 6,288,188 B1	09/11/2001	Godschalx et al.	
	A10	US- 6,433,359 B1	08/13/2002	Kelley et al.	

## Foreign Patent Documents

Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-KindCode (if known)				
	B1						

## OTHER DOCUMENTS

Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation (Check if yes)
	C1	C. D. SHERAW et al., "Organic Thin-Film Transistor-Driven Polymer-Dispersed Liquid Crystal Displays on Flexible Polymeric Substrates", Applied Physics Letter, (February 11, 2002), pp. 1088-1090, Vol. 80, No. 6, American Institute of Physics, Melville, NY	
	C2	C. D. DIMITRAKOPOULOS, et al., "Organic Thin Film Transistors for Large Area Electronics", Advanced Materials, (January 16, 2002), pp. 99-117, Vol. 14, No. 2, WILEY-VCH-Verlag GmbH, D-69469 Weinheim, Germany	
	C3	A. KRAFT, "Organic Field-Effect Transistors – The Breakthrough at Last", CHEMPHYSICHEM, (2001), pp. 163-165, Vol. 2, WILEY-VCH-Verlag GmbH, D-69451, Weinheim, Germany	
	C4	S. J. MARTIN, "Development of a Low-Dielectric-Constant Polymer for the Fabrication of Integrated Circuit Interconnect", Advanced Materials, (December 1, 2000), pp. 1769-1778, Vol. 12, No. 23, WILEY-VCH- Verlag GmbH, D-69469, Weinheim, Germany	
	C5	C. D. SHERAW, "Spin-On Polymer Gate Dielectric for High Performance Organic Thin Film Transistors", Mat. Res. Soc. Symp. Proc., (2000), pp. 403-408, Vol. 558, Materials Research Society	

\*Examiner:

Date Considered:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)  Page 2 of 2	<b>Application Number</b>	10/620027
	<b>Filing Date</b>	July 15, 2003
	<b>First Named Inventor</b>	Gerlach, Christopher P.
	<b>Art Unit</b>	1621
	<b>Examiner Name</b>	Unknown
	<b>Attorney Case Number</b>	58783US002

OTHER DOCUMENTS			
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation (Check if yes)
	C6	P. VAN ZANT, "Microchip Fabrication", (2000), 4 <sup>th</sup> Edition, McGraw-Hill, NY	
	C7	S. M. SZE, "Physics of Semiconductor Devices", (1981), pp. 492-493, 2 <sup>nd</sup> Edition, John Wiley & Sons, NY	
	C8	K. ITO, "Oligo(2,6-anthrylene)s: Acene-Oligomer Approach for Organic Field-Effect Transistors", Angewandte Chemie International Edition, (2003), pp. 1159-1162, Vol. 42, No. 10, WILEY-VCH-Verlag GmbH & Co. KGaA, Weinheim, Germany	
	C9	H. E. KATZ, "Synthetic Chemistry for Ultrapure, Processable, and High-Mobility Organic Transistor Semiconductors", Accounts of Chemical Research, (May 2001), pp. 359-369, Vol. 34, No. 5, American Chemical Society, Washington, DC	
	C10	"Organic Reactions", (1997), Vol. 50, John Wiley & Sons, Inc., NY	
	C11	A. F. LITKE et al., "Pd/P(t-Bu) <sub>3</sub> : A Mild and General Catalyst for Stille Reactions of Aryl Chlorides and Aryl Bromides", Journal of the American Chemical Society, (June 5, 2002), pp. 6343-6348, Vol. 124, No. 22, American Chemical Society, Washington, DC	
	C12	J. E. BANKS, "Cyclic Hydrocarbons and Substituted Hydrocarbons", Naming Organic Compounds, (1976), p. 124, 2 <sup>nd</sup> Edition, W. B. Saunders Co., Philadelphia, PA	
	C13	D. J. GUNDLACH et al., "Solvent-Induced Phase Transition in Thermally Evaporated Pentacene Films", Applied Physics Letters, (May 31, 1999), pp. 3302-3304, Vol. 74, No. 22, American Institute of Physics, Melville, NY	
	C14	H. KLAUK et al., "High-Mobility Polymer Gate Dielectric Pentacene Thin Film Transistors", Journal of Applied Physics, (November 1, 2002), pp. 5259-5263, Vol. 92, No. 9, American Institute of Physics, Melville, NY	
	C15	D. KNIPP et al., "Pentacene Thin Film Transistors on Inorganic Dielectrics: Morphology, Structural Properties, and Electronic Transport", Journal of Applied Physics, (January 1, 2003), pp. 347-355, Vol. 93, No. 1, American Institute of Physics, Melville, NY	
	C16	T. W. KELLEY et al., "High-Performance OTFTs Using Surface-Modified Alumina Dielectrics", Journal of Physical Chemistry, (June 19, 2003), pp. 5877-5881, Vol. 107, No. 24, American Chemical Society	
	C17	H. SIRRINGHAUS et al., "Mobility Enhancement in Conjugated Polymer Field-Effect Transistors Through Chain Alignment in a liquid-Crystalline Phase", Applied Physics Letters, (July 17, 2000), pp. 406-408, Vol. 77, No. 3, American Institute of Physics, Melville, NY	
	C18	Patent Application U.S.S.N. 10/434377, filed May 8, 2003, entitled "Organic Polymers, Electronic Devices, and Methods"	
	C19	Patent Application U.S.S.N. 10/328461, filed December 23, 2002, entitled "AC Powered Logic Circuitry"	

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	